

REMARKS

1. Summary of Office Action

In the Office Action mailed September 5, 2007, the Examiner rejected claims 1-7 and 12-18 as being anticipated by Rezaiifar et al. (US2004/0085951) ("Rezaiifar").

Claims 8-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rezaiifar in view of Colban et al. (2005/0118946) ("Colban").

Additionally, claims 19 and 20 were under 35 U.S.C. § 103(a) as being unpatentable over Rezaiifar in view of Colban and Nanji (US 2006/0193335) ("Nanji").

2. Status of Claims

Currently pending are claims 1-20 of which claims 1, 8, 12, 15 and 19 are independent, and the remainder of the claims are dependent. In this response, claims 15 and 19 have been amended to clarify the method is performed by the PDSN.

Claim 12 has been amended because of the following informality: Line 13 of claim 12 had a semi colon instead of a period at the end of the sentence.

3. Response to Rejections under 35 U.S.C. § 102(e)

The Examiner rejected claims 1-7 and 12-18 as being anticipated by Rezaiifar. Under M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Applicants respectfully traverse the rejection of claims 1-7 and 12-18 and request reconsideration. Rezaiifar does not teach all the elements of any of claims 1-7 and 12-18, and thus fails to anticipate.

a. Applicants Presently Claimed Invention

Applicants' presently claimed invention provides a PDSN handling simultaneous data sessions from dissimilar networks. A single PDSN can thus be used to handle data sessions from different access networks, without requiring a different PDSN for each type of network. Specification, page 4, lines 1-2. Applicants' claimed PDSN provides a protocol abstraction routine that identifies if a data packet is associated with a first RP transfer protocol or a second RP transfer protocol. Specification page 4, lines 2-6. The main RP protocols are open-RP described in TIA IS-835C and closed RP, a proprietary standard. Specification, page 8, lines 16-20. The data packets can then be encapsulated/decapsulated according to the identified RP transfer protocol for that network.

b. The Rezaiifar Prior Art

The Examiner alleges that Rezaiifar teaches or suggests identifying if a data packet is "associated with at least one of a first RP transfer protocol or a second RP transfer protocol. September 5, 2007 Office Action, page 2. According to the Examiner, "the tunnel ID is used to distinguish between the GRE and L2TP protocols." *Id.*

Contrary to the Examiner's rejections, Rezaiifar does not show the Packet Data Service Node (PDSN) 102 handling two dissimilar network protocols as the pending claims call for ("distinguishing between a first or a second RP protocol and encapsulating or decapsulating according to the different RP protocols"). Rezaiifar only encapsulates using one transfer protocol, Generic Routing Encapsulation (GRE) as described in paras. [0050] and [0051], Figures 2-3 and discussed below. Thus the PDSN 102 in Rezaiifar need not distinguish between multiple protocols.

In particular, Rezaiifar shows a wireless communication system where a single mobile node communicates using multiple tunnels or "micro-tunnels."¹ Figure 1 shows a single mobile node's communications segregated into multiple micro-tunnels (MN₁ or MN₂) between the Packet Control Function/Base Station Controller PCF/BSC 104 and the PDSN 102. Para. [0029]. Figure 1 shows MN 108 as having three micro-tunnels MN₁ and MN₂ 110 as having two micro-tunnels MN₂.

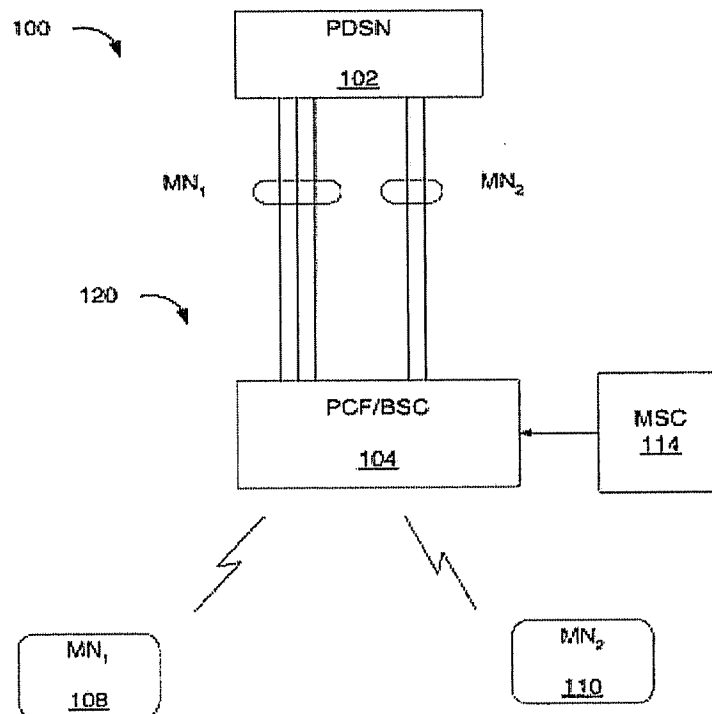


FIG. 1

Rezaiifar encapsulates the micro-tunnels using a single protocol, the GRE format shown in Figs. 2 and 3. Rezaiifar refers to L2TP and PPTP protocols, but the identity of the micro-flow itself (L2TP, PPTP, etc.) is hidden "due to GRE encapsulation." Para. 50, lines 1-3. These are flows encapsulated within the GRE micro-tunnels and the PDSN 102 does not distinguish between these protocols, as they are encapsulated in GRE.

¹ Multiple micro-tunnels provide differentiated levels of service from a Mobile Node. Para. [0038]. "[P]ackets transported via a given micro-tunnel are to be treated differently from the other packets transported via another micro-tunnel." Para. [0038].

Furthermore, Rezaiifar does not use "the tunnel ID . . . to distinguish between the GRE and L2TP protocols. The tunnel ID, MTID 304, is part of the GRE header. Rather, Rezaiifar specifically states the disclosed tunnel ID is "used by the PDSN 102 to *identify the micro-tunnel for a given user by the MTID*" and the associated mobile node, not to distinguish between protocols. Rezaiifar, Para. [0057], lines 8-10. Figures 2 and 3 show the Micro-Tunnel Identifier (MTID) field 304 within the GRE key field 300 of GRE header 204.

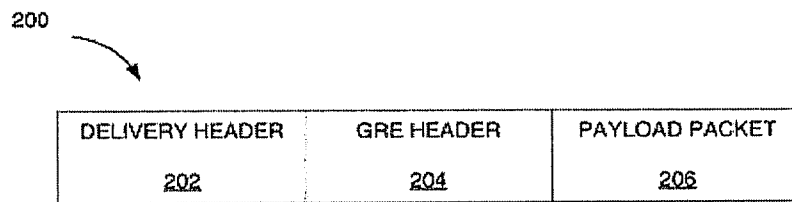


FIG. 2

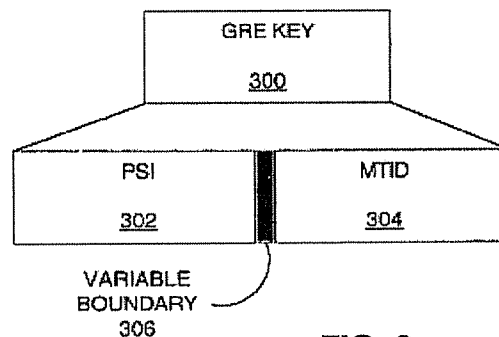


FIG. 3

The MTID 304 is "used by the PDSN 102 to *identify the micro-tunnel for a given user by the MTID.*" Para. [0057]. MTID 304 associates the micro-tunnel with a given user, it is not used to distinguish between different protocols.

Rezaiifar does not show Applicants' claimed PDSN with a protocol abstraction routine distinguishing between different transfer protocols. Because Rezaiifar only uses a single encapsulation protocol, GRE encapsulation, the PDSN 102 does not need to distinguish between different protocols or encapsulate-decapsulate according to different protocols. As a result, Rezaiifar does not anticipate applicants' claimed PDSN distinguishing between a "first RP

transfer protocol or a second RP transfer protocol," and "decapsulate or encapsulate the data packet according to the associated RP transfer protocol." Because the dependent claims include all the limitations of the independent claims, claims 1-7 and 12-18 are all allowable.

4. Response to Rejections under 35 U.S.C. § 103(a)

The Examiner also rejected claims 8-11 under 35 U.S.C. § 103(a) as being unpatentable over Rezaiifar in view of Colban. Additionally, the Examiner rejected claims 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Rezaiifar in view of Colban and Nanji.

In order to establish a *prima facie* case of obviousness of a claimed invention by applying a combination of references, the prior art must teach or suggest all of the claim limitations. M.P.E.P. § 2143. Applicants respectfully submit that the combination of Rezaiifar and Colban fail to teach or suggest all of the elements of any of Applicants' claims. Hence the Examiner has not established a *prima facie* case of obviousness.

As discussed above, Rezaiifar does not disclose Applicants' claimed PDSN handing dissimilar network protocols. Neither Colban nor Nanji cure the deficiencies of Rezaiifar. Nanji does not teach a PDSN capable of handling two dissimilar network protocols because, because Nanji, similar to Rezaiifar, teaches using only a single protocol. Nanji uses a Layer 2 Tunneling Protocol (L2TP) to replace other protocols such as GRE and Bridge Encapsulation Protocol (BCP). Paras. [0007][0022]("multiple subscribers who use different protocols over a single Ethernet capable Layer 2 Tunneling Protocol (L2TP)"). Nanji criticizes BCP and GRE as "inefficient" and lacking "robust signaling." Para. [0007]. Nanji bundles a number of different protocols into a single L2TP, thereby providing "non-homogeneous L2TP tunnels." Para. [0024]. Fig. 3 schematically depicts a single L2TP tunnel 318. As a result, the PDSN in Nanji does not handle dissimilar protocols, only the L2TP tunnels.

In view of the above discussion, Applicants submit that claims 8-11 and 19-20 are allowable.

5. Conclusion

In light of the above remarks, Applicants submit that the application is in good and proper form for allowance and respectfully requests the Examiner to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is invited to call the undersigned patent attorney, at 312-913-2134.

Respectfully submitted,

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